RESERVE CELL-ARRAY NANOSTRUCTURED BATTERY

A battery having an electrode with at least one nanostructured surface is disclosed wherein the nanostructured surface is divided into cells and is disposed in a way such that an electrolyte fluid of the battery is prevented from contacting the portion of electrode associated with each cell. When a voltage is passed over the nanostructured surface associated with a particular cell, the electrolyte fluid is caused to penetrate the nanostructured surface of that cell and to contact the electrode, thus activating the portion of the battery associated with that cell. The current/voltage generated by the battery is controlled by selectively activating only a portion of the cells. Multiple cells can be active simultaneously to produce the desired voltage. The more cells that are active, the higher the current/voltage and the lower the overall life of the battery. The life of the battery can be extended by activating fewer cells simultaneously.